

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
TYLER DIVISION**

**ON SEMICONDUCTOR
CORPORATION, and
SEMICONDUCTOR COMPONENTS
INDUSTRIES, L.L.C.,**

Plaintiffs,

V.

CIVIL ACTION NO. 6:09-cv-390

**HYNIX SEMICONDUCTOR INC.,
HYNIX SEMICONDUCTOR
AMERICA INC.,
HYNIX SEMICONDUCTOR
MANUFACTURING AMERICA,
INC.,
ELPIDA MEMORY, INC.,
ELPIDA MEMORY (USA) INC.,
NANYA TECHNOLOGY
CORPORATION,
NANYA TECHNOLOGY-TEXAS
L.L.C.,
NANYA TECHNOLOGY
CORPORATION, USA,
HITTITE MICROWAVE
CORPORATION,**

Defendants.

COMPLAINT FOR PATENT INFRINGEMENT

For their Complaint, Plaintiffs ON Semiconductor Corp. (“ON Semiconductor”) and Semiconductor Components Industries, L.L.C. (“Semiconductor Components”) (collectively “Plaintiffs”) allege the following:

PARTIES

1. ON Semiconductor is a Delaware corporation having its principle place of business at 5005 East McDowell Rd., Phoenix, AZ 85008.

2. Semiconductor Components is a Delaware limited liability company having its principal place of business at 5005 East McDowell Rd., Phoenix, AZ 85008. Semiconductor Components is the principal domestic operating subsidiary of ON Semiconductor, and does business under the name of ON Semiconductor.

3. On information and belief, Defendant Hynix Semiconductor Inc. (“HSI”) is a Korean corporation headquartered at San 136-1, Ami-Ri, Bubal-eup, Icheon-si, Gyeonggi-Do, 467-866, Korea.

4. On information and belief, Defendant Hynix Semiconductor America (“HSA”) is a California corporation and a subsidiary of HSI having a principal place of business at 3101 North First St., San Jose, CA 95134. Upon information and belief, HSA also has offices at 4201 West Parmer Lane Bldg. B, Suite 280, Austin, TX 78727; 1701 Gateway Blvd., Suite 357, Richardson, TX 75080; and 13455 Cutton Rd., Suite 1-I, Houston, TX 77069.

5. On information and belief, Defendant Hynix Semiconductor Manufacturing America Inc. (“HSMA”) is a California corporation having a principal place of business at 1830 Willow Creek Circle, Eugene, OR 97402. Collectively, HSI, HSA, and HSMA are referred to herein as the “Hynix defendants.”

6. On information and belief, Defendant Elpida Memory, Inc is a Japanese corporation having a principal place of business at Sumitomo Seimei Yaesu Building, 3rd Floor, 2-1 Yaesu 2-chome Chuo-ku, Tokyo, Japan.

7. On information and belief, Defendant Elpida Memory (USA) Inc. is a Delaware corporation having a principal place of business at 2001 Walsh Avenue; Santa Clara, CA 95050. On information and belief, Elpida Memory (USA) Inc. is a wholly owned subsidiary of Elpida Memory, Inc. that also has offices at 4100 Duval Rd # 1-102, Austin, TX 78759 and 363 N Sam

Houston Pkwy E # 770, Houston, TX 77060. Collectively, Elpida Memory, Inc. and Elpida Memory (USA) Inc. are referred to herein as the “Elpida defendants.”

8. On information and belief, Defendant Nanya Technology Corporation is a Taiwanese corporation having a principal place of business at 669 Fu Hsing 3rd Rd., Kueishan, Taoyuan 333, Taiwan.

9. On information and belief, Defendant Nanya Technology – Texas, L.L.C. is a Texas limited liability company having a principal place of business at 8323 Southwest Fwy., Suite 850, Houston, TX 77074.

10. On information and belief, Defendant Nanya Technology Corporation U.S.A. is a California corporation having a principal place of business at 5104 Old Ironsides Dr., Suite 113; Santa Clara, CA 95054. Collectively, Nanya Technology Corporation, Nanya Technology – Texas, L.L.C., and Nanya Technology Corporation U.S.A. are referred to herein as the “Nanya defendants.”

11. On information and belief, Defendant Hittite Microwave Corporation (“Hittite”) is a Delaware corporation with a principal place of business at 20 Alpha Road, Chelmsford, MA 01824. On information and belief, Hittite has offices in Dallas, Texas and has an authorized distributor in Plano, Texas.

JURISDICTION

12. Plaintiffs’ cause of action for patent infringement against the Defendants arises under the patent laws of the United States, including 35 U.S.C. §§ 271 and 281. Consequently, this Court has original subject matter jurisdiction over this suit pursuant to 28 U.S.C. §§ 1331 and 1338.

13. Defendants are subject to the specific and general personal jurisdiction of this Court because, among other things, they have established continuous and systematic contacts with Texas and with this judicial district, they have committed acts within Texas and this judicial district giving rise to this action, and they have minimum contacts with the forum such that the exercise of jurisdiction over the Defendants would not offend traditional notions of fair play and substantial justice. For instance, the Defendants have distribution networks wherein the Defendants place products that infringe the Plaintiffs' patents into the stream of commerce such that those products flow into Texas and this district. Defendants have also committed acts of patent infringement and/or induced or contributed to others' acts of patent infringement within this district and within Texas.

14. Pursuant to 28 U.S.C. §§ 1391 and/or 1400(b), this Court is a proper venue for this action.

PATENTS AT ISSUE

15. On March 21, 1995, United States Patent No. 5,400,286 (the "'286 patent"), entitled "Self-Recovering Erase Scheme to Enhance Flash Memory Endurance," was duly and legally issued by the United States Patent and Trademark Office. Plaintiffs hold all right, title, and interest in the '286 patent, including the right to sue for past, present, and future infringement. A copy of the '286 patent is attached to the Complaint as Exhibit A.

16. On March 26, 2002, United States Patent No. 6,362,644 (the "'644 patent"), entitled "Programmable Termination for Integrated Circuits," was duly and legally issued by the United States Patent and Trademark Office. Plaintiffs hold all right, title, and interest in the '644 patent, including the right to sue for past, present, and future infringement. A copy of the '644 patent is attached to the Complaint as Exhibit B.

17. On November 1, 1994, United States Patent No. 5,361,001 (the “’001 patent”), entitled “Circuit and Method of Previewing Analog Trimming,” was duly and legally issued by the United States Patent and Trademark Office. Plaintiffs hold all right, title, and interest in the ’001 patent, including the right to sue for past, present, and future infringement. A copy of the ’001 patent is attached to the Complaint as Exhibit C.

18. On October 8, 1996, United States Patent No. 5,563,594 (the “’594 patent”), entitled “Circuit and Method of Timing Data Transfers,” was duly and legally issued by the United States Patent and Trademark Office. Plaintiffs hold all right, title, and interest in the ’594 patent, including the right to sue for past, present, and future infringement. A copy of the ’594 patent is attached to the Complaint as Exhibit D.

19. On July 18, 1995, United States Patent No. 5,434,523 (the “’523 patent”), entitled “Circuit and Method for Adjusting a Pulse Width of a Signal,” was duly and legally issued by the United States Patent and Trademark Office. Plaintiffs hold all right, title, and interest in the ’523 patent, including the right to sue for past infringement. A copy of the ’523 patent is attached to the Complaint as Exhibit E.

20. The ’286, ’644, ’001, ’594, and ’523 patents are collectively referred to herein as the “ON patents.”

COUNT ONE – INFRINGEMENT OF THE ’286 PATENT

21. Plaintiffs reallege and incorporate by reference paragraphs 1 through 20 as if fully set forth herein.

22. After a reasonable opportunity for further investigation and discovery, the facts will show that the Hynix defendants are now and have been infringing, contributorily infringing, and/or inducing infringement of the ’286 patent, literally or under the doctrine of equivalents, by,

among other things, making, using, offering to sell, selling, and/or importing products that infringe one or more claims of the '286 patent. After a reasonable opportunity for further investigation and discovery, the facts will show that such infringing products include, but are not limited to, the Hynix defendants' HY27SF081G2A flash memory and other flash memory products.

23. Unless enjoined, the Hynix defendants will continue to infringe the '286 patent and Plaintiffs will continue to suffer irreparable injury as a direct and proximate cause of the Hynix defendants' actions.

24. Plaintiffs have been damaged by the Hynix defendants' actions and, until an injunction issues, will continue to be damaged in an amount yet to be determined.

COUNT TWO – INFRINGEMENT OF THE '644 PATENT

25. Plaintiffs reallege and incorporate by reference paragraphs 1 through 20 as if fully set forth herein.

26. The Hynix defendants are now and have been infringing, contributorily infringing, and/or inducing infringement of the '644 patent, literally or under the doctrine of equivalents, by, among other things, making, using, offering to sell, selling, and/or importing products that infringe one or more claims of the '644 patent. Such infringing products include, but are not limited to, DRAM memory products such as the Hynix defendants' DDR2, DDR3, GDDR3 and GDDR4 products. An example infringing product is the Hynix defendants' HY5PS124(8/16)21FP SDRAM.

27. The Hynix defendants were aware of the '644 patent at least as early as September 28, 2006, when Plaintiffs demonstrated to Hynix that certain Hynix products infringed the '644 patent. Hynix nevertheless continued its infringing activities despite knowing that there was at

least an objectively high likelihood that its actions constituted infringement of the '644 patent. The Hynix defendants' infringement is thus deliberate and willful.

28. Plaintiffs have been and continue to be damaged by the Hynix defendants' actions in an amount yet to be determined.

29. The Elpida defendants are now and have been infringing, contributorily infringing, and/or inducing infringement of the '644 patent, literally or under the doctrine of equivalents, by, among other things, making, using, offering to sell, selling, and/or importing products that infringe one or more claims of the '644 patent. Such infringing products include, but are not limited to DRAM memory products such as the Elpida defendants' DDR2 and DDR3 products. An example infringing product is the Elpida defendants' EBE51UD8ABFA SDRAM.

30. Plaintiffs have been and continue to be damaged by the Elpida defendants' actions in an amount yet to be determined.

31. The Nanya defendants are now and have been infringing, contributorily infringing, and/or inducing infringement of the '644 patent, literally or under the doctrine of equivalents, by, among other things, making, using, offering to sell, selling, and/or importing products that infringe one or more claims of the '644 patent. Such infringing products include, but are not limited to DRAM memory products such as the Nanya defendants' DDR2 and DDR3 products. An example infringing product is the Nanya defendants' M2Y2G64TU8HB0J-25D SDRAM.

32. Plaintiffs have been and continue to be damaged by the Nanya defendants' actions in an amount yet to be determined.

33. Defendant Hittite is now and has been infringing, contributorily infringing, and/or inducing infringement of the '644 patent, literally or under the doctrine of equivalents, by,

among other things, making, using, offering to sell, selling, and/or importing products that infringe one or more claims of the '644 patent. Such infringing products include, but are not limited to Hittite's Fanout buffers such as part number HMC670LC3C.

34. Unless enjoined, defendant Hittite will continue to infringe the '644 patent and Plaintiffs will continue to suffer irreparable injury as a direct and proximate cause of Hittite's actions.

35. Plaintiffs have been damaged by defendant Hittite's actions and, until an injunction issues, will continue to be damaged in an amount yet to be determined.

COUNT THREE – INFRINGEMENT OF THE '001 PATENT

36. Plaintiffs reallege and incorporate by reference paragraphs 1 through 20 as if fully set forth herein.

37. The Hynix defendants are now and have been infringing, contributorily infringing, and/or inducing infringement of the '001 patent, literally or under the doctrine of equivalents, by, among other things, making, using, offering to sell, selling, and/or importing products that infringe one or more claims of the '001 patent. Such infringing products include, but are not limited to DRAM memory products such as the Hynix defendants' DDR2, DDR3, GDDR3, and GDDR4 products. An example infringing product is the Hynix defendants' HY5RS123235FP SDRAM.

38. The Hynix defendants were aware of the '001 patent at least as early as September 28, 2006, when Plaintiffs demonstrated to Hynix that certain Hynix products infringed the '001 patent. Hynix nevertheless continued its infringing activities despite knowing that there was at least an objectively high likelihood that its actions constituted infringement of the '001 patent. The Hynix defendants' infringement is thus deliberate and willful.

39. Plaintiffs have been and continue to be damaged by the Hynix defendants' actions in an amount yet to be determined.

40. The Elpida defendants are now and have been infringing, contributorily infringing, and/or inducing infringement of the '001 patent, literally or under the doctrine of equivalents, by, among other things, making, using, offering to sell, selling, and/or importing products that infringe one or more claims of the '001 patent. Such infringing products include, but are not limited to DRAM memory products such as the Elpida defendants' DDR2 and DDR3 products. An example infringing product is the Elpida defendants' EBE51UD8ABFA SDRAM.

41. Plaintiffs have been and continue to be damaged by the Elpida defendants' actions in an amount yet to be determined.

42. The Nanya defendants are now and have been infringing, contributorily infringing, and/or inducing infringement of the '001 patent, literally or under the doctrine of equivalents, by, among other things, making, using, offering to sell, selling, and/or importing products that infringe one or more claims of the '001 patent. Such infringing products include, but are not limited to DRAM memory products such as the Nanya defendants' DDR2 and DDR3 products. An example infringing product is the Nanya defendants' M2Y2G64TU8HB0J-25D SDRAM.

43. Plaintiffs have been and continue to be damaged by the Nanya defendants' actions in an amount yet to be determined.

COUNT FOUR – INFRINGEMENT OF THE '594 PATENT

44. Plaintiffs reallege and incorporate by reference paragraphs 1 through 20 as if fully set forth herein.

45. The Hynix defendants are now and have been infringing, contributorily infringing, and/or inducing infringement of the '594 patent, literally or under the doctrine of equivalents, by, among other things, making, using, offering to sell, selling, and/or importing products that infringe one or more claims of the '594 patent. Such infringing products include, but are not limited to DRAM memory products such as the Hynix defendants' DDR, DDR2, and DDR3 products. Examples of such products are the Hynix defendants' HY5DU12422B(L)TP, and HY5DU12422A(L)T-D4 products.

46. The Hynix defendants were aware of the '594 patent at least as early as September 28, 2006, when Plaintiffs demonstrated to Hynix that certain Hynix products infringed the '594 patent. Hynix nevertheless continued its infringing activities despite knowing that there was at least an objectively high likelihood that its actions constituted infringement of the '594 patent. The Hynix defendants' infringement is thus deliberate and willful.

47. Plaintiffs have been and continue to be damaged by the Hynix defendants' actions in an amount yet to be determined.

48. The Elpida defendants are now and have been infringing, contributorily infringing, and/or inducing infringement of the '594 patent, literally or under the doctrine of equivalents, by, among other things, making, using, offering to sell, selling, and/or importing products that infringe one or more claims of the '594 patent. Such infringing products include, but are not limited to DRAM memory products such as the Elpida defendants' DDR, DDR2, and DDR3 products. Examples of such infringing products are the Elpida defendants' EDD5108AGTA and EBE51UD8ABFA SDRAMs.

49. Plaintiffs have been and continue to be damaged by the Elpida defendants' actions in an amount yet to be determined.

50. The Nanya defendants are now and have been infringing, contributorily infringing, and/or inducing infringement of the '594 patent, literally or under the doctrine of equivalents, by, among other things, making, using, offering to sell, selling, and/or importing products that infringe one or more claims of the '594 patent. Such infringing products include, but are not limited to DRAM memory products such as the Nanya defendants' DDR, DDR2, DDR3 products. Examples of such infringing products are the Nanya defendants' M2Y2G64TU8HB0J-25D and M2Y1G64DS8HB1G SDRAMs.

51. Plaintiffs have been and continue to be damaged by the Nanya defendants' actions in an amount yet to be determined.

COUNT FIVE – INFRINGEMENT OF THE '523 PATENT

52. Plaintiffs reallege and incorporate by reference paragraphs 1 through 20 as if fully set forth herein.

53. The Hynix defendants are now, have been, and will continue to infringe, contributorily infringe, and/or induce infringement of the '523 patent, literally or under the doctrine of equivalents, by, among other things, making, using, offering to sell, selling, and/or importing products that infringe one or more claims of the '523 patent. Such infringing products include, but are not limited to, DRAM memory products implementing the CAS latency, additive latency, and burst length mode registers, such as the Hynix defendants' DDR2 and DDR3 products. In such products, the pulse width of the output signal is selected based on clock signals determined by the CAS latency and the burst-length mode register. An example infringing product is the Hynix defendants' HYMP512R72P8 SDRAM.

54. Plaintiffs have been and continue to be damaged by the Hynix defendants' actions in an amount yet to be determined.

55. The Elpida defendants are now, have been, and will continue to infringe, contributorily infringe, and/or induce infringement of the '523 patent, literally or under the doctrine of equivalents, by, among other things, making, using, offering to sell, selling, and/or importing products that infringe one or more claims of the '523 patent. Such infringing products include, but are not limited to, DRAM memory products implementing the CAS latency, additive latency, and burst length mode registers, such as the Elpida defendants' DDR2 and DDR3 products. In such products, the pulse width of the output signal is selected based on clock signals determined by the CAS latency and the burst-length mode register. An example infringing product is the Elpida defendants' EBE51UD8ABFA SDRAM.

56. Plaintiffs have been and continue to be damaged by the Elpida defendants' actions in an amount yet to be determined.

57. The Nanya defendants are now, have been, and will continue to infringe, contributorily infringe, and/or induce infringement of the '523 patent, literally or under the doctrine of equivalents, by, among other things, making, using, offering to sell, selling, and/or importing products that infringe one or more claims of the '523 patent. Such infringing products include, but are not limited to, DRAM memory products implementing the CAS latency, additive latency, and burst length mode registers, such as the Nanya defendants' DDR2 and DDR3 products. In such products, the pulse width of the output signal is selected based on clock signals determined by the CAS latency and the burst-length mode register. An example infringing product is the Nanya defendants' M2Y2G64TU8HB0J-25D SDRAM.

58. Plaintiffs have been and continue to be damaged by the Nanya defendants' actions in an amount yet to be determined.

PRAYER FOR RELIEF

WHEREFORE, Plaintiffs pray for the following relief:

1. A judicial determination that each of the Hynix defendants have infringed, contributorily infringed, and/or induced infringement of the '286, '644, '001, '594, and '523 patents;
2. A judicial determination that each of the Elpida and Nanya defendants have infringed, contributorily infringed, and/or induced infringement of the '644, '001, '594, and '523 patents;
3. A judicial determination that defendant Hittite has infringed, contributorily infringed, and/or induced infringement of the '644 patent;
4. A judicial determination that each of the ON patents is valid and enforceable;
5. A judicial determination that the Hynix defendants have willfully infringed the '644 patent, the '001 patent, and the '594 patent, and that Plaintiffs be awarded treble damages under 35 U.S.C. § 284 for that willful infringement;
6. A permanent injunction enjoining each of the Hynix defendants, their agents, officers, assigns and others acting in concert with them from infringing, inducing infringement of, and/or contributing to infringement of the '286 patent;
7. A permanent injunction enjoining defendant Hittite, its agents, officers, assigns and others acting in concert with it from infringing, inducing infringement of, and/or contributing to infringement of the '644 patent;

8. An award of damages, including an accounting of damages, to compensate Plaintiffs for the aforesaid infringement of the ON patents;

9. An award of pre-judgment interest and post-judgment interest on the damages awarded;

10. A determination that this is an exceptional case and an award of Plaintiff's attorney's fees pursuant to 35 U.S.C. § 285 and any other applicable statute or law, and an award of Plaintiff's costs and disbursements incurred herein; and

11. Such other relief as the Court deems equitable under the circumstances.

JURY DEMAND

Pursuant to Fed. R. Civ. P. 38 and Local Rule 38.1(b), Plaintiffs demand a jury trial on all issues triable to a jury.

Dated: August 28, 2009	<p>Respectfully submitted,</p> <p><u>/s/ Michael E. Jones</u></p> <p>Michael E. Jones State Bar No. 10929400 Email: mikejones@potterminton.com POTTER MINTON A Professional Corporation 110 N. College 500 Plaza Tower Tyler, TX 75702 (903) 597-8311 (903) 593-0846 (facsimile)</p> <p>Michael A. Oblon <i>pro hac vice to be filed</i> Lead Attorney Email: MOblon@perkinscoie.com PERKINS COIE LLP 607 Fourteenth Street, N.W. Washington, DC 20005 Telephone: (202) 434-1600</p> <p>Jerry A. Riedinger, <i>pro hac vice to be filed</i> Email: JRiedinger@perkinscoie.com</p>
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